

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Non-elected claims 1-4 have been cancelled. Claim 5 has been amended. Claims 21-24 have been added. Claims 5-24 are currently pending.

Drawings

Formal drawings will be promptly submitted once a Notice of Allowance is issued in the application.

Rejection of claims 5, 6, 8, 9, 15, and 20 under 35 U.S.C. 102(b) as being anticipated by Ermert et al. (Publication from Plastics Engineering titled “R U Reinforcing plastics with robots)

Claim 5 has been amended to specify that a robotic tape applicator comprising a computer means, wherein the computer means includes *programmed data respecting the shape of the work piece and the proposed path of the tape* and a tape applicator means under the control of the computer means *to apply the tape to the work piece along said path*. The Examiner alleged that Ermert et al. disclose a robotic tape applicator which is “capable of performing” the previously claimed “method” limitation (See pages 2-3 of Office Action). It is respectfully submitted that while Ermert et al. may have disclosed a robotic tape applicator that is capable of performing certain methods, Ermert et al. do not disclose a robotic tape applicator with all the claimed features in claim 5 as amended. MPEP 2131 states that for a prior-art rejection of anticipation under 35 U.S.C. 102, “[a] claim is *anticipated* only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (Emphasis added). (Quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Because Ermert et al. fail to disclose each and every element as set forth in claim 5 as amended, it is respectfully submitted that claim 5 and its dependent claims 6-7 are allowable over Ermert et al.

Furthermore, regarding claim 6, Ermert et al. do not disclose *an activator applicator means* adapted to apply *an activator liquid* along the predetermined path prior to the application of the tape, and the rejection failed to make any reference to such limitations.

Regarding the rejection of claim 8, it is respectfully traversed for at least the following reasons:

The Examiner generally pointed to Figures 1, 2, 4, and 5 provided by Ermert et al. to reject the claim, using language found in the claim but without specifying where each and every claimed limitation can be found in the figures. It is respectfully submitted that Ermert et al. do not disclose the robotic tape applicator as claimed. For instance, Ermert et al. do not disclose a robotic arm comprising “a roller adapted to releasably store *two-sided adhesive tape*.” (Emphasis added). In fact, Figures 5 and 6 of Ermert et al. actually teach away from a roller that can store two-sided adhesive tape. As shown in those two figures, if a two-sided adhesive tape is used, one side of the tape would have been stuck to the foil, which would not have allowed the foil to be separated from the tape and taken up by the foil takeup roll (shown in Figure 5). Indeed, the systems disclosed in Ermert et al. are conceived for application of fiber reinforced tape, and there is no mention of *adhesive tape* as claimed. As understood in the art, the term “pre-preg tapes” in Ermert et al. refer to fiber tapes used to apply to a previously coated surface and not adhesive tape as claimed.

Likewise, Ermert et al. do not show any guide means, tape applicator head comprising “*a nose biased to permit reciprocal motion in a direction normal to the work piece*” (Emphasis added), and/or cutting means *integral with the tape applicator head*. Furthermore, it is not clear what the Examiner alleged in Ermert et al. to be *the pneumatically controlled piston in a compliance cylinder is adapted to maintain a constant pressure on the tape applicator head*, as stated in claim 15, or the tape applicator head that *comprises a smooth radius, the centre point of which radius lies along a roll axis of the robotic arm*, as stated in claim 20. Should the Examiner continue to allege that Ermert et al. disclose the robotic tape applicator stated in claim 8, it is respectfully requested that the Examiner provides with sufficient clarity where each and every claimed limitation can be found in Ermert et al. Absent such clarification, it is respectfully

submitted that the Examiner failed to establish a *prima facie* case of anticipation under 35 U.S.C. 102.

Rejection of claims 7, 10, 11, 16-18 under 35 U.S.C. 103(a) by Ermert et al. in view of Frank (U.S.P. No. 4,382,836)

Regarding claims 7 and 11, the reasons set forth above for the allowability of claims 5 and 8 over Ermert et al. also apply here. Furthermore, as stated earlier, it is not clear what the Examiner considered to be the tape applicator head in Ermert et al. in order to understand how a tape braking means shown by Frank can be applied to the tape applicator head, as alleged by the Examiner. This is not to mention the question of where in Frank can such tape braking means can be found, or how such tape braking means can be integrated into the system(s) of Ermert et al. for proper functioning? Also, a structural limitation is provided for the tape breaking means to hold the tape stationary during cutting, and the Examiner cannot disregard this limitation by alleging it to be a rejected method limitation, presumably, under product-by-process. Because the Examiner failed to provide such evidence as required by *Graham v. Deere*, it is respectfully submitted that the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. 103, and claims 7 and 11 are allowable over the references of record.

Regarding claim 10, the reasons set forth above for the allowability of claim 8 over Ermert et al. also apply here. Furthermore, it is not clear where the “nip rolls” can be found in Frank, as alleged by the Examiner.

Regarding claims 16-18, the reasons set forth above for the allowability of claim 8 over Ermert et al. also apply here. Furthermore, as stated earlier, it is not clear what the Examiner considered to be *the tape cutting means that is integral with the tape applicator head* in Ermert et al. in order to understand how the disclosure by Frank can be applied to the system(s) of Ermert et al. This is not to mention the question of where in Frank can a knife blade, pneumatic/hydraulic blade control piston, and knife blade sensor can be found, or how those components can be integrated into the system(s) of Ermert et al. for proper functioning? Because the Examiner failed to provide such evidence as required by *Graham v. Deere*, it is respectfully

submitted that the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. 103, and claims 16-18 are allowable over the references of record.

Rejection of claims 5-11, 15-18, and 20 under 35 U.S.C. 103(a) as being unpatentable over Frank in view of Ermert et al. or alternatively over Ermert et al. in view of Frank

First of all, this rejection shows that Ermert et al. alone cannot be used to anticipate claims 5 and 8 under 35 U.S.C. 102(b), as alleged by the Examiner.

Second of all, as stated earlier, claim 5 as amended provides for a robotic tape applicator comprising a computer means, wherein the computer means includes *programmed data respecting the shape of the work piece and the proposed path of the tape* and a tape applicator means under the control of the computer means *to apply the tape to the work piece along said path*. Ermert et al. clearly do not disclose such limitations so that the system(s) shown in Ermert et al. can be combined with Frank to reject claims 5-7.

Third of all, regarding claim 8, the Examiner once again failed to clarify where all the limitations can be found in Frank and/or Ermert et al., or how the various components disclosed in Frank and Ermert et al. can be combined in an obvious manner to read on the claimed invention. Because the Examiner failed to provide such evidence as required by *Graham v. Deere*, it is respectfully submitted that the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. 103, and claims 8-20 are allowable over the references of record.

Rejection of claims 12, 13, 14, and 19 under 35 U.S.C. 103(a) by Ermert et al. and Frank and further in view of various other references

The reasons set forth above for the allowability of claim 8 over Ermert et al. in view of Frank (or Frank in view of Ermert et al.) also apply here. And as stated earlier, claims 8-20 are allowable over the references of record.

New Claims

New claim 15 has been added to specify that the tape is an adhesive tape, which is neither anticipated nor made obvious by the references of record, as previously stated.

New claims 22-24 further differentiate the claimed invention from the references of record by providing for a fixed or stationary nose, i.e., not a driven roller as found in Ermert et al. and other references of record, and the vacuum ports are used to provide pressure and keep the tape slideably held to the stationary nose.

Conclusion

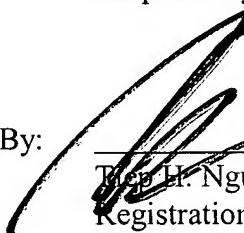
For at least all of the above reasons, it is respectfully submitted that the present invention is neither disclosed nor suggested by the references of record, and the claims now pending patentably distinguish the present invention from the references of record. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited upon the filing of a continuation.

Respectfully submitted,

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